Integrity
Honesty
Quality
Efficiency

City of San Antonio





Citizens' Guide to Public Works Services

Welcome to City of San Antonio Public Works Department

This guide is designed to inform you, the citizen, of the many services provided by the Public Works Department. In order to service the entire City of San Antonio, the Department consists of several smaller divisions that coordinate with each other in order to best maintain the City's infrastructure. Public Works consists of Disability Access Office, Pavement Engineering, Right of Way Management, Street Maintenance, Storm Water Engineering and Operations, and Traffic Engineering and Operations.

Public Works is also involved with the Infrastructure Management Program and Traffic Signal Synchronization Program. These programs are designed to utilize our staff's fullest potential to service the community. We strive to accomplish these tasks efficiently, effectively, and with accountability to the community we serve. Sincerely, the City of San Antonio Public Works Department.

Important Public Works Contact Information:

Right of Way	**207-6949**
Storm Water Operations	**207-6580**
Street Maintenance	**359-3110**
Traffic Engineering	**207-8058**
Traffic Operations	**207-7765**

To report issues or concerns, call 311.

Table of Contents

Traffic Signal System Modernization/ Synchronization Project

The goal of this project is to help traffic move more efficiently on our existing roadways by maximizing the use of traffic signal lights already installed. Improved communication with the traffic signals and optimized signal timings can reduce delay and stops for vehicles traveling down main roadways.

The Traffic Signal System Modernization/ Synchronization Program consist of three initiatives to be fully implemented in four years.

The three initiatives to be implemented concurrently include:

- Comprehensive Communications Network
- Advanced Traffic Control System
- Traffic Signal Coordination

Project Goals

- Maximize flow of traffic
- Reduce traffic delay
- Reduce fuel consumption and emissions
- Reduce number of accidents

Comprehensive Communications Network

Traffic signal lights can be remotely maintained and updated through direct communications. This will allow for faster maintenance of traffic lights that are not working.

The communications network will provide dedicated communications links (via fiber and wireless transmission) to support current and future transportation needs. This direct communications will provide access to the traffic signals and the individual components which will allow remote troubleshooting, evaluation, and updating of traffic signal timings.

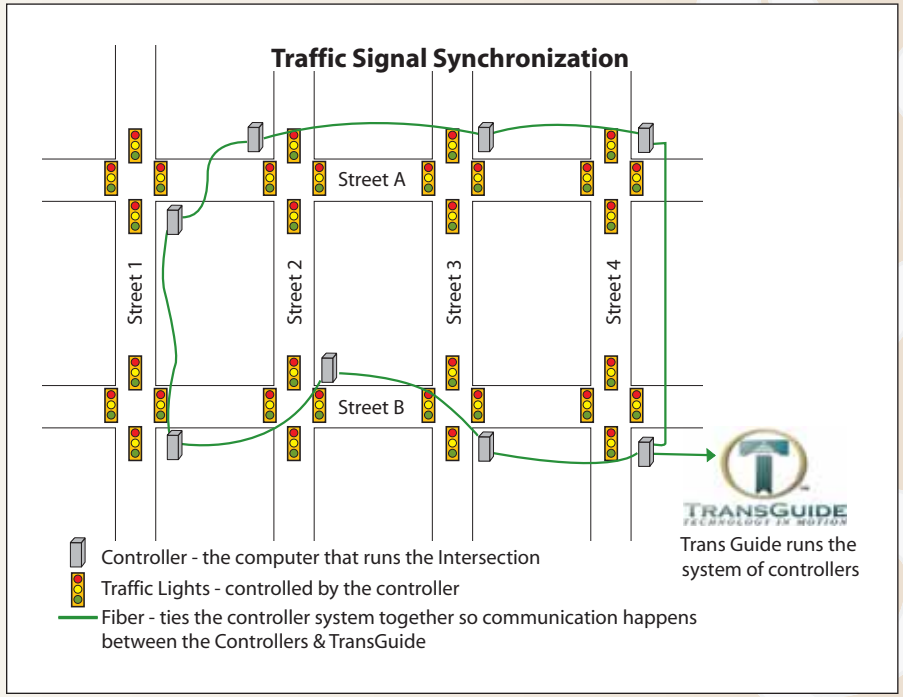
Advanced Traffic Control System

All traffic signal controllers will be upgraded. The upgraded traffic signal controllers will have greater capabilities than the existing controllers. These types of controllers will meet our increasing operational needs by providing the flexibility necessary to implement complex traffic signal timing plans.

Additional upgrades call for the installation of Uninterruptible Power Supplies (UPS) at critical traffic signals to ensure a back up energy supply is available when needed. This upgrade will provide the range of operational control needed by a traffic signal system the size of San Antonio's.

Traffic Signal Coordination

In order to allow the greatest number of vehicles through a group of signals with minimal stops, traffic signal lights will be re-timed and coordinated. Data must be collected and analyzed for each of the 1,200 traffic signals in order to develop and implement the best signal timing plan.

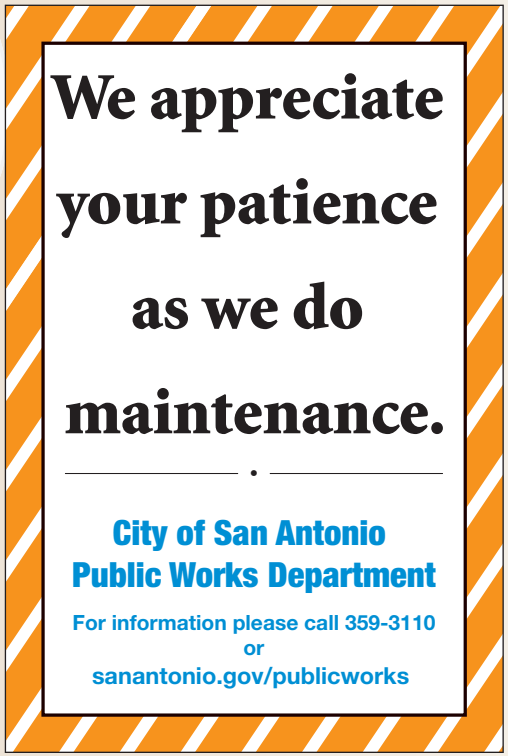


Infrastructure Management Program

The Public Works Department's responsibility is to provide maintenance for the infrastructure of San Antonio. The City's infrastructure consists of roads, sidewalks, traffic signals and signs, alleys, and drainage systems.

The IMP focuses on maintenance on all areas of San Antonio's Infrastructure. Streets in all City Districts will be rehabilitated based on certain criteria. Much needed sidewalks will be installed throughout San Antonio to keep pedestrians safe. Drainage ditches will be maintained for flood and vegetation control.

Traffic signal lights will be installed and maintained in conjunction with the Traffic Signal Management Program. The goal of the IMP is to provide the best possible maintenance for the City of San Antonio. The schedule for the IMP is available online at the Public Works website.



The Infrastructure Management Plan (IMP) identifies projects and develops schedules for street maintenance, drainage maintenance, sidewalks, traffic signals, and the most recent, service alleys.

The benefits of the Infrastructure Program include:

- More accurate cost estimates
- Program management
- Fiscal control
- Improved utility coordination
- Potential increase for multiple year contract awards
- Provides developers information for coordination with projects
- Improves citizen confidence with project delivery

Projects can continue to be requested through 311 customer service request from citizens, City Council, and City Staff requests.

Advanced Transportation District (ATD)

The Advanced Transportation District (ATD) is a joint venture between VIA, Texas Department of Transportation, Bexar County, and the City of San Antonio Public Works Department. This multiagency coordination improves and maintains San Antonio's major thoroughfare infrastructure.

The ATD will assist Public Works to improve streets by:

- Reducing traffic congestion
  Traffic signal timing, additional signals, construction of new lanes, roadway widening, and other mobility improvements

- Improving sidewalks
  Add or improve sidewalks with priority given to those on or adjacent to transit corridors

- Incorporating ADA-compliant improvements
  To sidewalks, curbs, and wheelchair ramps

- Improving pedestrian and bicycle safety
  Crosswalks, pedestrian street markers, countdown pedestrian signals, audible pedestrian signals, bike lanes

- Provide for fully coordinated street, highway and public transit planning

Sidewalks

Before

After

Pedestrian and Street Markings

ADA Improvements

Before

After

Disability Access Office

The Disability Access Office (DAO) works towards a universally designed environment that makes it easy for all people, regardless of disability, to participate fully in community life. The main goal of the DAO is to remove barriers of access to accommodate all people.

The four priorities for barrier removal are:

- Accessible entrances into the facility and path of travel to reach those entrances
- Access to goods and services
- Access to restrooms
- Any other measures necessary to provide access

These barrier removals are based on "good faith" meaning that all barriers do not have to be removed at once but a plan should be implemented for future removal.

The DAO coordinates with other City Departments to review and amend city codes, policies, and procedures to assure they are universally usable to all. The DAO oversees an interdepartmental Sidewalk Compliance Team, participates in other jurisdiction's access and planning initiatives and trains and provides technical assistance to City Departments and the private sector in meeting the requirements of the Americans with Disabilities Act (ADA).

The San Antonio Building Access Modification Plan, coordinated by the DAO, serves as a master plan to modify all City facilities to accommodate all users. A City Council appointed Disability Access Advisory Committee (DAAC) serves as a valuable resource. The DAO oversees the sidewalk work on the IMP to ensure that the sidewalks meet the standards of the ADA and are beneficial to all.

Ramp leading from Riverwalk to the International Building at St. Mary's & Market Street

Hike and Bike

The City of San Antonio's Bicycle and Pedestrian Program, part of the Traffic Engineering Division, is dedicated to improving and enhancing bicycling and walking as a safe and viable transportation option.

This is achieved through planning, engineering and policy development, as well as educating the community and agencies about bicycle transportation.

Benefits of hike and bike trails include:

- Stress Relief
  Biking and walking allows you the time to think through life's trials or a mental escape from your problems. Physical activity can increase endorphins giving your mood a natural boost leaving you more relaxed.
- Traffic Relief
  Traffic time on bicycle for most urban trips is much shorter than a car due to its smaller size. Riding a bicycle gets you much closer to your destination since bicycle parking is more readily available and is usually free.
- Environmental Benefits
  Bicycling and walking doesn't contribute to air pollution. Bicycling in place of driving saves an estimated 700 million gallons of fuel annually in the United States.
- Economic Benefits
  Bicycling provides a cost efficient means of travel. Bicycle commuting saves you parking fees, fuel costs, and high maintenance costs.
- Health Benefits
  Bicycling and walking improves personal fitness, enhances energy levels and stimulates the immune system. Bicycling and walking reduce the risk of heart disease, diabetes, and other chronic illnesses. Women who walk 40 to 45 minutes five times a week are sick less often as sedentary women.
- Weight Loss
  You can lose approximately 18 pounds a year without dieting if you walk 40 to 45 minutes, four times a week.

San Antonio Missions National Historical Park
(12 miles of Hike & Bike Trails)

Pavement Engineering

The main responsibility of Pavement Engineering is to provide assistance to the Street Maintenance Division to ensure that streets are rehabilitated correctly and the most efficient way possible. Pavement Engineering with input form the Street Maintenance Division is responsible for the development of proposed projects and their associated application for the City's street maintenance program.

They are to provide technical input associated with the street maintenance program. They also assist with utility coordination. Pavement Engineering is responsible for managing maintenance work on streets done by contract forces rather than the Street Maintenance Division. They also coordinate with other Public Works divisions with any work that involves pavement.

Pavement Condition Rating (PCR) is a numerical scale based on measurements of pavement roughness, surface distress, skid resistance and deflection. This rating helps in the selection of streets needing repair and also helps determine the type of application needed for the repair.

Right of Way Management

Right-of-Way (ROW) Management is responsible for standardizing the street cutting process for the safety of the public, maintaining the integrity of the infrastructure, and monitoring for compliance through utility coordination. Regulation of Right of Way prevents unauthorized digging and protects the City's infrastructure.

Goals of ROW are to reduce public inconvenience, guarantee proper street repair, respond to public demand for quality streets, and equitable application of regulations to all providers. All Right-of-Way users must be registered with the City prior to obtaining permits. Once a user is registered, a permit can be obtained via the web, http:\\row.sanantonio.gov. Allow 10 days for processing of application.

Anyone interested in using and/or excavating in the Right-of-Way, which include, but are not limited to the following:

- Public Utility Companies
- Private Utility Companies
- Developers
- Home Builders
- Plumbers
- Irrigators
- Telecommunications
- Cable Companies
- Pipeline Companies
- Railroad companies
- City and County Entities

San Antonio Water Systems Excavating in the Right-of-Way

Street Maintenance

The Street Maintenance Division is committed to perform the functions of planning, implementation, development, and management of the City's infrastructure system of streets to the highest safety and cost-effective standards possible. With over 300 employees they provide maintenance repair, and reconstruction activities for approximately 3727 miles of City streets and 166 centerline miles of service alleyways.

With service centers located in every quadrant of the City, our maintenance activities include, but are not limited to providing limited alley maintenance, pothole repair, bridge and street de-icing and flood and storm response.

In addition to work on the IMP the Street Maintenance Division also performs the following duties:

- Pothole Patching
- Minor Pavement Failure Repairs
- Base and Pavement Repair
- Roadway Reconstruction
- Limited Alley Maintenance
- 24-Hour Emergency Traffic Management Service
- Bridge and Street De-icing
- Flood and Storm Response
- Emergency Barricading

Street Maintenance

Storm Water Engineering

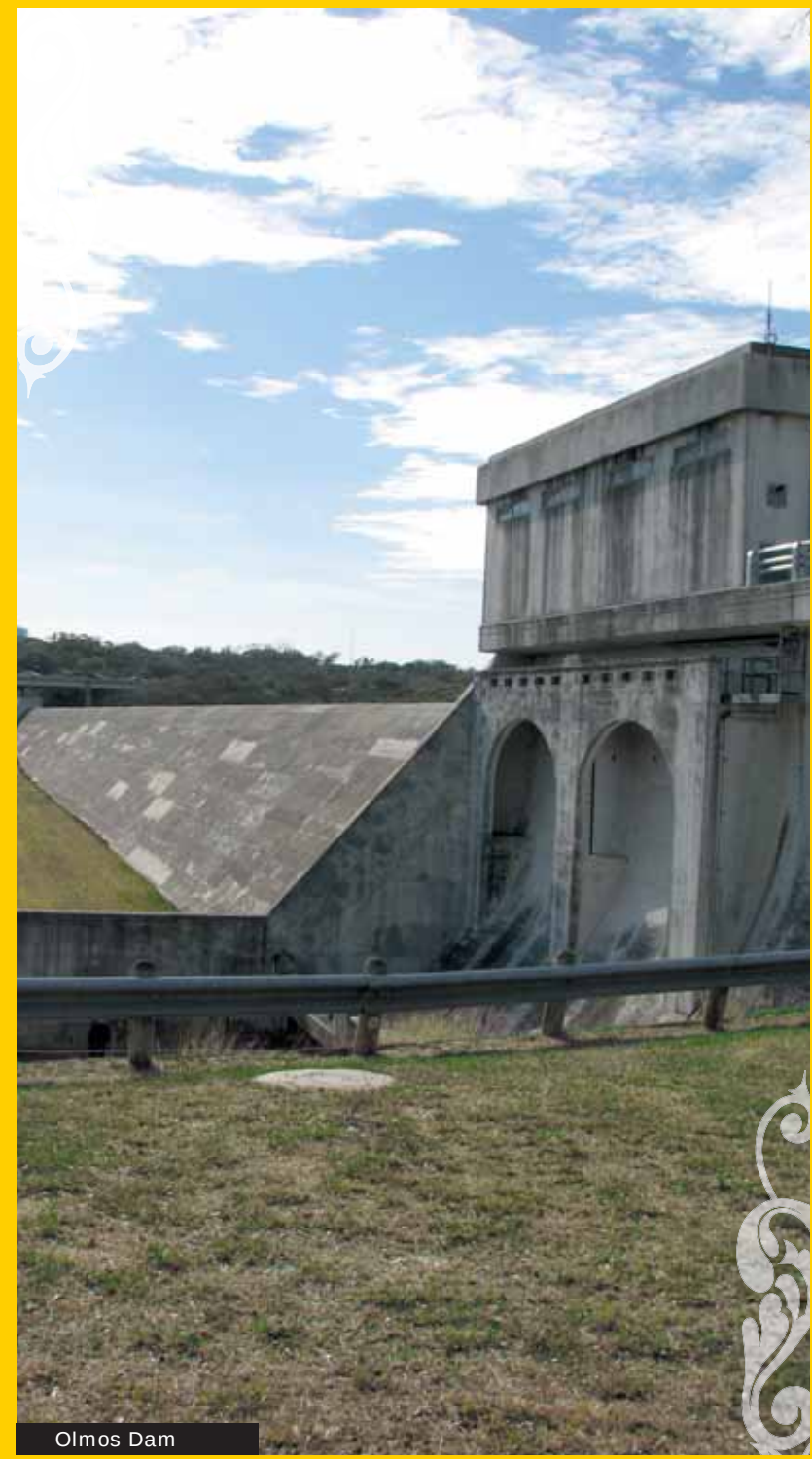
Storm Water Engineering is responsible for the management of storm water throughout the City of San Antonio. Their responsibilities include floodplain management, review of municipal infrastructure projects to insure drainage needs are addressed, review of all development which includes plats and permits, and control and maintenance of the Olmos Basin Dam and other flood control. They also provide customer service response for various storm water and drainage issues.

They interact with the City Engineer's staff, Street Maintenance Division, and Storm Water Operations Division. Storm Water Engineering also collaborates with the Planning Department, Development Services Department, and Downtown Operations on a daily basis.

Storm Water Engineering is also a part of the Bexar Regional Watershed Management (BRWM) which is a joint effort of the City of San Antonio, San Antonio River Authority, Bexar County, and suburban cities in and around San Antonio. The purpose of the BRWM is to improve citizen's quality of life, protect life and property, and provide for safe transportation during heavy rain and flood events. The BRWM is designed to address water quality and quantity issues collaboratively, rather than individually.

All services provided by Storm Water Engineering are in support of one of the three major programs National Flood Insurance Program (NFIP), Texas Pollutant Discharge Elimination System (TPDES) and mandates from City Council.

For more information on regional flood control efforts, please visit the Bexar Regional Watershed Management website.



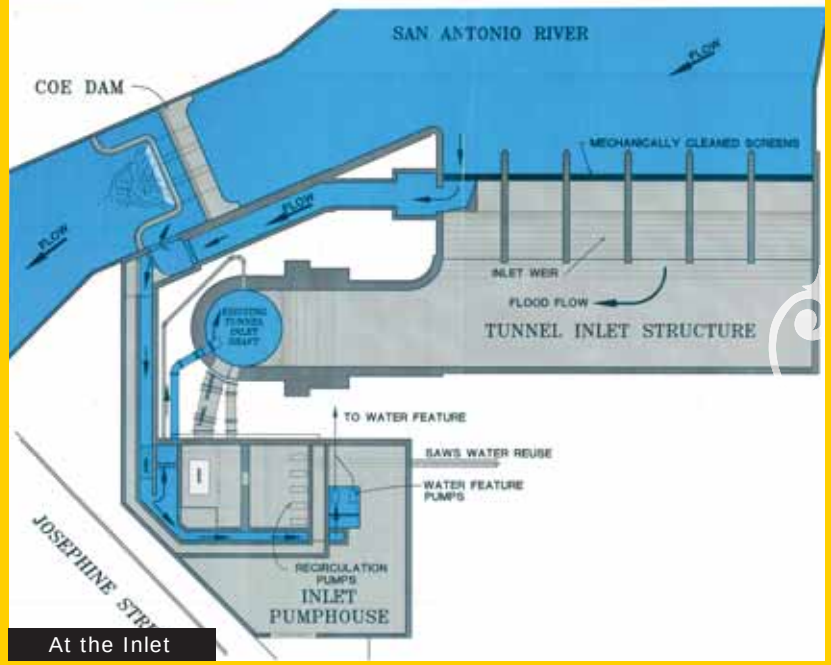
Olmos Dam

Storm Water Operations

Storm Water Operations is responsible for drainage control and maintenance for flood prevention in San Antonio. They maintain and operate drainage infrastructure which includes: grading channels, erosion channels, concrete channel repair, facility cleaning and vegetation maintenance. Storm Water Operations works closely with Storm Water Engineering to provide comprehensive, efficient and effective storm water management. Mowing and street sweeping schedules can be found on the Public Works website.

The four major sections of Storm Water Operations include:

- Vegetation maintenance
  Vegetation maintenance consists of mowing drainage channels and easements along the channels.
- River maintenance
  Natural waterways and designed channels are inspected on a regular basis for debris removal, re-grading, and re-silting by the river maintenance crew.
- Street cleaning
  The street cleaning crew sweeps City streets on a planned schedule in order to prevent debris from building up on curbs and causing potential drainage problems.
- Tunnel operations.
  Tunnel operations purpose is to monitor and insure that the major flood control facilities within the City are operating correctly. Major flood control structures in the City include the San Antonio River and San Pedro Creek Tunnels and Olmos Dam.



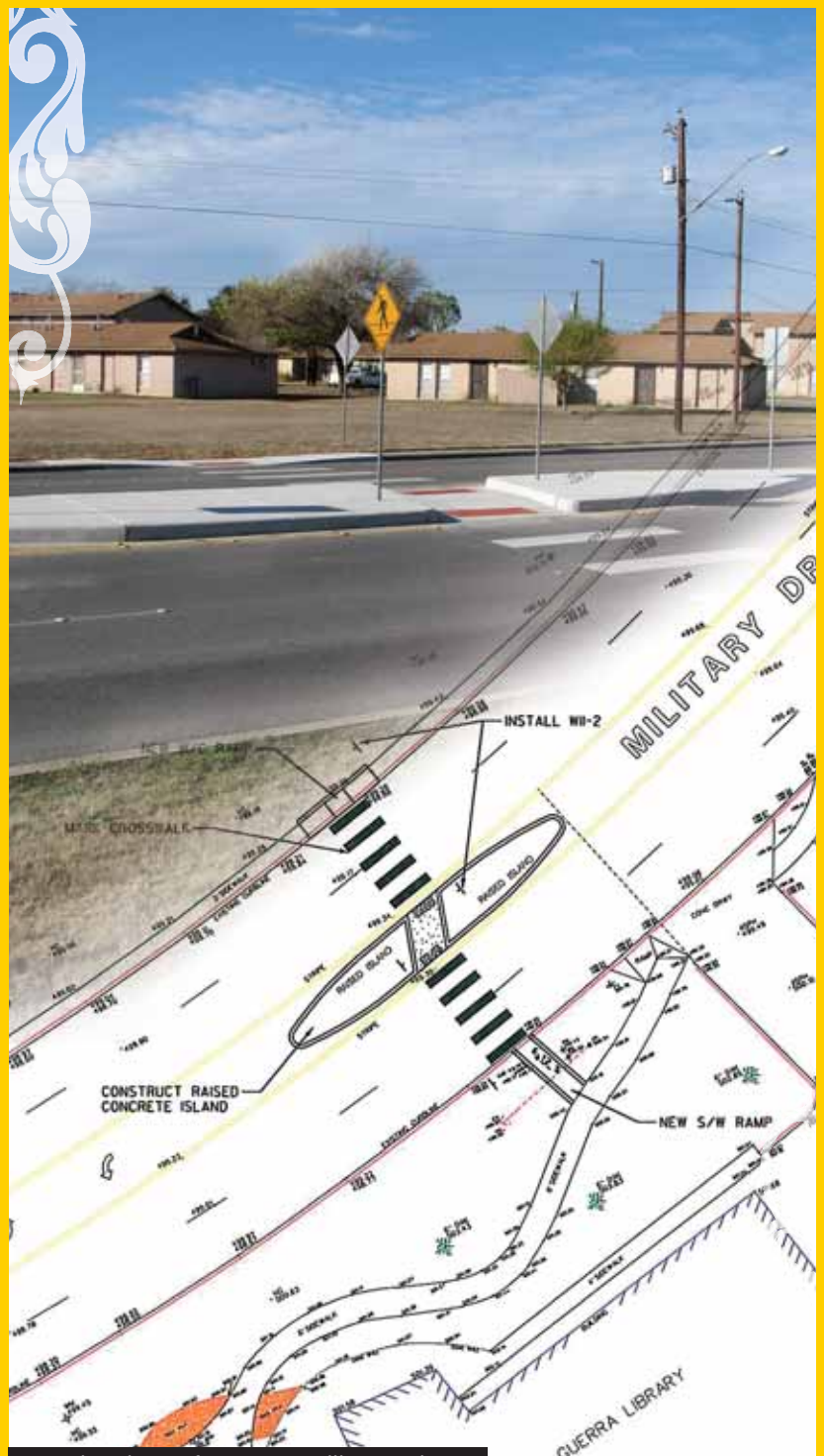
At the Inlet

Traffic Engineering

It is the goal of Traffic Engineering to encourage the safe and efficient movement of people and goods through a well designed, operated and maintained, transportation network of city streets and highways. Traffic Engineering evaluates need for traffic signs, pavement markings, and traffic signals through traffic studies and counts. They also review traffic accident patterns in search of opportunities to implement safety and improvements and address neighborhood traffic challenges. Traffic Engineering also handles permits for temporary street and sidewalk closures.

The studies are used for various traffic control methods such as: stop signs, speed humps, traffic signal lights, school flashers, crosswalks, and curb markings.

The Bicycle and Pedestrian Program is part of Traffic Engineering and works with other agencies and departments to provide the best and safest bike routes in the city. As part of the Advanced Transportation District, Traffic Engineering plays an integral role in the Traffic Signal System Modernization and Synchronization Project. Their traffic studies are being used to improve signal timing for the best possible traffic flow and for accident prevention. The Neighborhood Traffic Engineering Section handles traffic control and studies in San Antonio neighborhoods and works closely with the Bicycle and Pedestrian Program to provide safe routes within a neighborhood.



Pedestrian Refuge at W. Military Drive

Traffic Operations

The Traffic Operations Division is dedicated to installing and maintaining traffic signals, signs, markings in a safe, efficient, and productive manner to encourage the safe and efficient movement of people and goods. Traffic Operations is responsible for the installation and maintenance of traffic signal lights at intersections within the city limits and school zone flashers.

They also construct, install, operate, and repair traffic signal lights, flashing beacons, and various traffic control signs. Pavement markings are also installed and maintained by Traffic Operations. The location of the traffic signal lights and school zone flashers are determined by studies done by Traffic Engineering.

Signs are installed according to guidelines set forth in the state approved Texas Manual on Uniform Traffic Control Devices (TMUTCD).

As part of the IMP, Traffic Operations is installing new traffic signal lights around San Antonio. They will also benefit from the Traffic Signal System Modernization and Synchronization Project by having to do less on site maintenance for traffic signal lights. To report malfunctioning traffic signals, downed traffic signs or other traffic operations problems please call the Traffic Operations Center at (210)207-7765 or 311.

Installation of a Traffic Signal Mast Arm at Knollcreek @ O'Connor